

**FIG. 1**  
 (PRIOR ART)

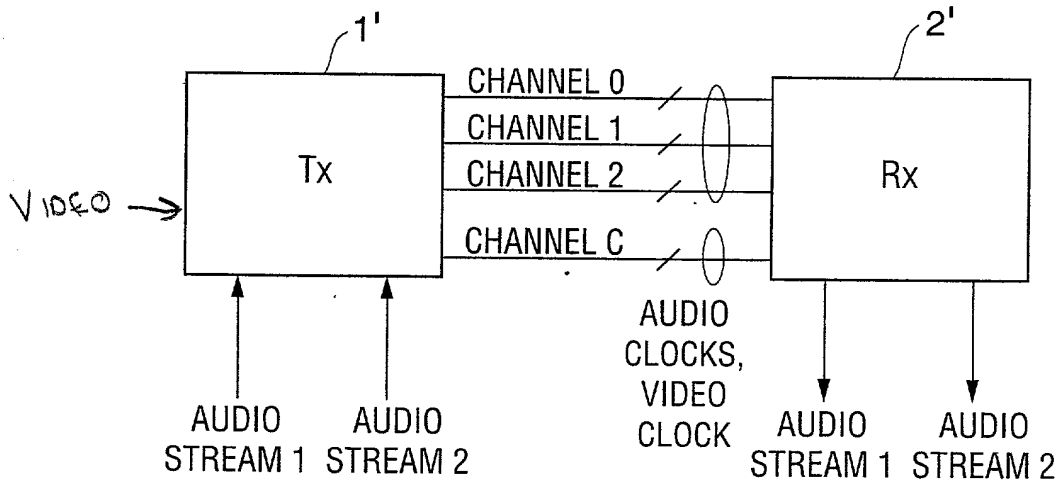


FIG. 2

|   | Input D7-D0 | Hex | TMDS pattern |
|---|-------------|-----|--------------|
| PRE-DATA GUARD BAND<br>for Aux data   | 01010101    | 55  | 1100110010   |
| AD0   | 01011011    | 5B  | 0011100101   |
| AD1   | 10110101    | B5  | 0110001101   |
| AD2   | 11010011    | D3  | 0010011101   |
| AD3   | 11011001    | D9  | 0100011101   |
| AD4   | 01101101    | 6D  | 0111000101   |
| AD5   | 10100100    | A4  | 0011100110   |
| AD6   | 10010010    | 92  | 0111000110   |
| AD7   | 01000100    | 44  | 0011110010   |
| AD8   | 00100010    | 22  | 0111100010   |
| AD9   | 01001011    | 4B  | 1001110010   |
| AD10  | 10010011    | 93  | 1000111010   |
| GUARD BAND for video<br>data and POST-DATA<br>GUARD BAND for Aux data<br>(and AD11) | 10101011    | AB  | 0011001101   |
| AD12  | 01011010    | 5A  | 1100011001   |
| AD13  | 01101100    | 6C  | 1000111001   |
| AD14  | 10100101    | A5  | 1100011010   |
| AD15  | 10111010    | BA  | 1100001101   |

FIG. 4

| Specific CTL    | CTL [1:0] | Preamble (q0 : q9) | Guardband (q0 : q9) | GB (d7 : d0)           | Purpose  |
|-----------------|-----------|--------------------|---------------------|------------------------|--|
| R (CTL [3:2])   | 00        | 0010101011         | 0011001101          | 0xAB                   | Video Preamble/Video<br>Guardband/Post-Data Aux<br>Guardband |
| G (CTL [1:0])   | 00        | 0010101011         | 0011001101          | 0xAB                   | Video Preamble/Video<br>Guardband/Post-Data Aux<br>Guardband |
| B (VSYNC:HSYNC) | XX        | 1 of 4 values      | 0011001101          | 0xAB                   | Video Preamble/Video<br>Guardband                            |
| R (CTL [3:2])   | 01        | 1101010100         | 1100110010          | 0x55                   | Aux Preamble/Pre-Data Aux<br>Guardband                       |
| G (CTL [1:0])   | 10        | 0010101010         | 1100110010          | 0x55                   | Aux Preamble/Pre-Data Aux<br>Guardband                       |
| B (VSYNC:HSYNC) | XX        | 1 of 4 values      | 1 of 4 values       | 0x5B, 0xB5, 0xD3, 0xD9 | Aux Preamble/Pre- or Post-Data Aux<br>Guardband              |
| R (CTL [3:2])   | 10        | 0010101010         |                     |                        | VSync Window, HDCP enabled                                   |
| G (CTL [1:0])   | 00        | 0010101011         |                     |                        | VSync Window, HDCP enabled                                   |
| B (VSYNC:HSYNC) | 1X        | 1 of 2 values      |                     |                        | VSync Window, HDCP enabled                                   |

FIG. 3

FIG. 5

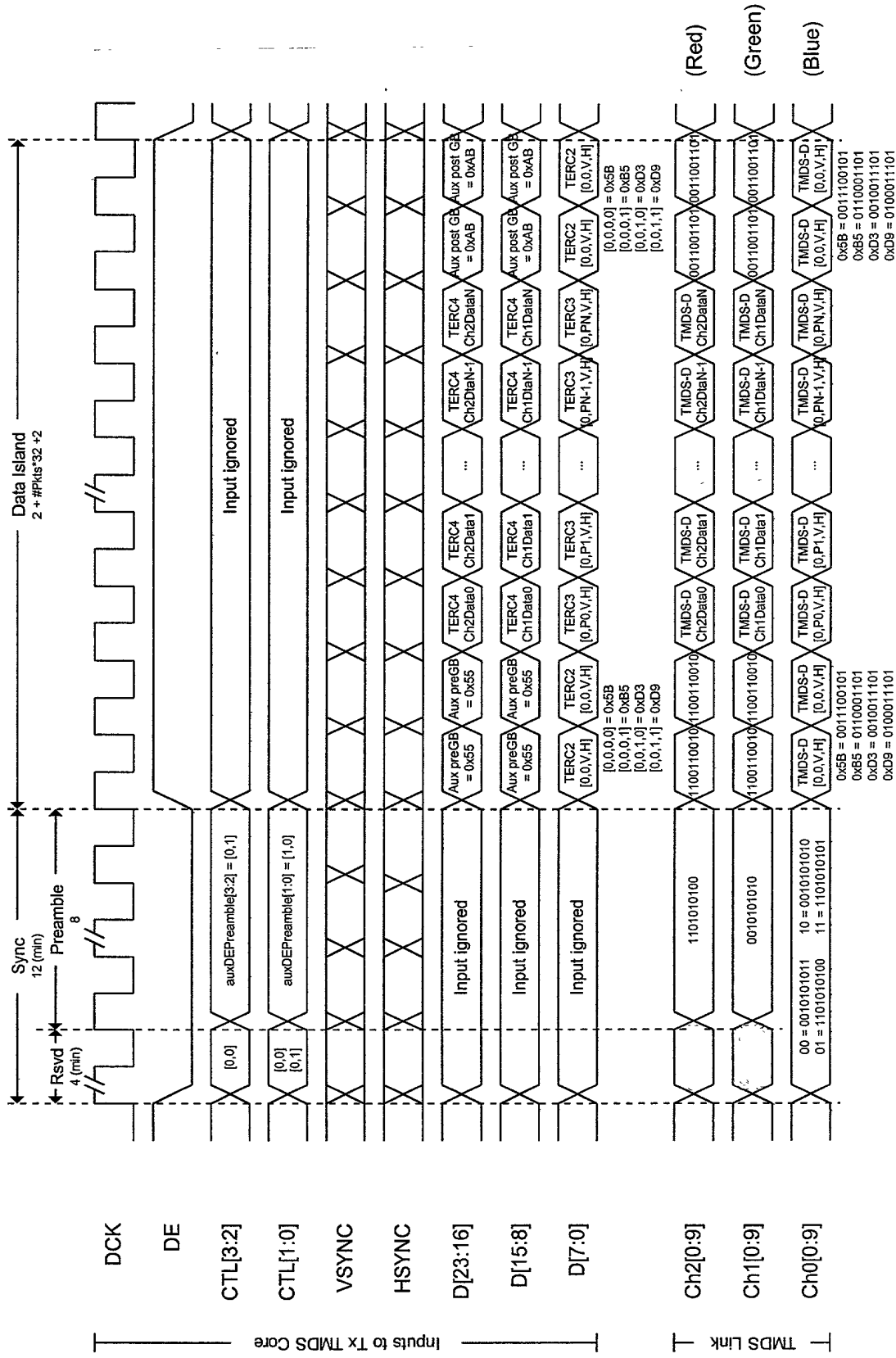


FIG. 6

FIG. 6

